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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,440	06/11/2001	Jon J. Week	SUN-P5696	3545

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EXAMINER

KANG, INSUN

ART UNIT	PAPER NUMBER
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2193

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/879,440

Applicant(s)

WEEK, JON J.

Examiner

Insun Kang

Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the amendment filed 3/29/2005.
2. As per applicant's request, claims 18-34 have been amended. Claims 1-52 are pending in the application.

Claim Rejections - 35 USC § 101

3. The rejection to claims 18-34 has been withdrawn due to the amendment to the claims.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (US Pub No. 2003/0182650) in view of Sun WorkShop TeamWare: User's Guide (Sun Microsystems, Inc., 1996) hereinafter referred to as "TeamWare."

Per claim 1:

Smith discloses:

-displaying a list of at least one group of computer programs so as to allow a user to select a group of computer programs to be built, each of said at least one group of computer programs having a set of specific environmental requirements in which said at least one group of computer programs is to be compiled and executed ("library selecting

Art Unit: 2193

logic responsive to said library selector for selecting, from among a plurality of libraries of machine code entities, a selected library of machine code entities having a best level of execution environment requirements compatible with said limiting level of execution environment requirements indicated by said library selector,” pg 1, 0011; “A software development toolkit (SDT) such as the ARM Developer Suite (ADS) presents its users with many build options,” page 7 lines 16-20; “software development system...to model the compatibility and desirability in the target execution environment of various build option parameters selected by a user....This library selector may be used to select a particular library of machine code entities compatible with these execution environment requirements whilst providing the most desirable machine code entities to exploit the capabilities of the target data processing system,” abstract; page 1, 0004)

- receiving a user's selection of a group of computer programs from said list of said at least one group of computer programs (“The different build options that may be specified by a user of the software development tools...,”page 1, 0018; “software development system...to model the compatibility and desirability in the target execution environment of various build option parameters selected by a user....This library selector may be used to select a particular library of machine code entities compatible with these execution environment requirements whilst providing the most desirable machine code entities to exploit the capabilities of the target data processing system,” abstract; page 1, 0004)

Smith does not explicitly teach displaying a list of a plurality of computers, each computer of said plurality of computers having at least one environmental characteristic.

Art Unit: 2193

However, TeamWare teaches that it was known in the art of software component-based development and configuration, at the time applicant's invention was made, to visually indicate each different computers to the user and to distribute "builds over several hosts to build programs concurrently over a number of workstations or multiple CPUs (section 20: Using DistributedMake)" such as those disclosed in TeamWare. It would have been obvious for one having ordinary skill in the art of computer software component-based development and configuration to modify Smith's disclosed system to incorporate the teachings of TeamWare. The modification would be obvious because one having ordinary skill in the art would be motivated to ease the build process in a software development system as suggested by TeamWare ("A Dmake user on a Dmake host can specify the machines they want to use as build servers and the number of jobs they want to distribute to each build server...from GUI (Building)," section 20: Using DistributedMake; "choose a TeamWare target from the list," section 19, Modifying a TeamWare Target)."

TeamWare further discloses determining each computer, in said plurality of computers, capable of building the selected group of computer programs based on said at least one environmental characteristic (Dmake parses your makefiles and...[d]etermines which targets can be built concurrently...[d]istributes the build of those targets over a number of hosts designated by you," section 20: Using DistributedMake) indicating each said capable computer on said list of the plurality of computers and designating a capable computer in response to the user's selection of a computer from the capable computers on said list of the plurality of computers (Dmake

Art Unit: 2193

parses your makefiles and...[d]etermines which targets can be built concurrently...[d]istributes the build of those targets over a number of hosts designated by you," section 20: Using DistributedMake) as claimed.

Per claim 2:

The rejection of claim 1 is incorporated, and further, Smith discloses displaying a list of user-selectable options ("different build options that may be specified by a user," page 1, 0018; "library selector," page 1, 000; page 7 lines 16-20) as claimed.

Per claim 3:

The rejection of claim 2 is incorporated, and further, Smith discloses determining available build options for the selected computer; and indicating said available build options on said list of user-selectable options ("a selected library of machine code entities having a best level of execution environment requirements compatible with said limiting level of execution environment requirements indicated by said library selector," page 1, 0011) as claimed.

Per claim 4:

The rejection of claim 2 is incorporated, and further, Smith discloses executing, in response to a user-selectable option being selected, a build process for the selected group of computer programs using the selected computer ("perform a method of generating a group of machine code entities for execution upon a target data

Art Unit: 2193

processing apparatus from a group of source code entities, each source code entity having at least one build option parameter,” page 2, 0026) as claimed.

Per claim 5:

The rejection of claim 4 is incorporated, and further, Smith discloses outputting a result of said executing the build process (“IDE or “make” system acting as the user’s agent,” page 3, 0050; page 8, lines 1-17; “ARM developer Suite (ADS),” page 7 lines 16-20) as claimed.

Per claim 6:

The rejection of claim 2 is incorporated, and further, Smith discloses building, testing, checking a group of computer programs and removing existing computer programs and files from a specific location assigned to a selected group; and logging a result of executing a selected build option (“IDE or “make” system acting as the user’s agent,” page 3, 0050; page 8, lines 1-17; “ARM developer Suite (ADS),” page 7 lines 16-20) as claimed.

Per claim 7:

The rejection of claim 2 is incorporated, and further, Smith discloses determining available processes for a selected user-selectable option, and displaying a list of said available processes page 2, 0026) as claimed.

Per claim 8:

The rejection of claim 1 is incorporated, and further, TeamWare discloses obtaining said at least one environmental characteristic of said each computer, and comparing said at least one environmental characteristic with said set of specific environmental requirements of the selected group of computer programs (see section 20: The Dmake Host) as claimed.

Per claim 9:

The rejection of claim 8 is incorporated, and further, TeamWare discloses maintaining a file containing environmental characteristics of the plurality of computers; and reading said at least one environmental characteristic of said each computer from said file (see section 20: The Dmake Host) as claimed.

Per claim 10:

The rejection of claim 9 is incorporated, and further TeamWare discloses updating said environmental characteristics of the plurality of computers contained in said file (see section 20: The Dmake Host) as claimed.

Per claim 11:

The rejection of claim 8 is incorporated, and further, TeamWare discloses said at least one environmental characteristic is obtained by making a query to said plurality of computers (see section 20: The Dmake Host) as claimed.

Per claim 12:

The rejection of claim 1 is incorporated, and further, TeamWare discloses said at least one environmental characteristic of the computer includes at least one of a number of CPUS within the computer, a CPU architecture, a bus width, a version and type of an operating system, and an average load of the computer (see section 20: The Dmake Host) as claimed.

Per claim 13:

The rejection of claim 1 is incorporated, and further, TeamWare discloses Highlighting each said capable computer on said list of plurality of the computers section 20: Using DistributedMake; "choose a TeamWare target from the list," section 19, Modifying a TeamWare Target)" as claimed.

Per claim 14:

The rejection of claim 1 is incorporated, and further, TeamWare discloses said set of specific environmental requirements includes at least one of a number of CPUS, CPU architecture, a bus width, and a type and version of an operating system (see section 20: The Dmake Host) as claimed.

Per claim 15:

The rejection of claim 1 is incorporated, and further, Smith discloses said at least one group of computer programs is at least one library (page 1, 0011) as claimed.

Per claim 16:

Art Unit: 2193

The rejection of claim 15 is incorporated, and further, Smith discloses said set of specific environmental requirements includes at least one of a number of CPUS, CPU architecture, a bus width, a type and version of an operating system, a method of compiling, and a link type of a library (page 7, lines 16-25; page 1, 0018) as claimed.

Per claim 17:

The rejection of claim 16 is incorporated, and further, Smith discloses said displaying a list of said at least one group of computer programs includes showing at least one of said specific environmental requirements for each library("a selected library of machine code entities having a best level of execution environment requirements compatible with said limiting level of execution environment requirements indicated by said library selector," page 1, 0011 and 0019) as claimed.

Per claims 18-34, they are the computer-based tool versions of claims 1-17, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1-17 above.

Per claims 35-51, they are the apparatus versions of claims 1-17, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1-17 above.

Per claim 52, it is the program storage device version of claim 1, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 1 above.

Response to Arguments

6. Applicant's arguments filed 3/29/2005 have been fully considered but they are not persuasive.

Per claim 1:

The applicant argues that:

There has been no citation to any display in Smith and the Examiner has not even asserted in this part of the rejection that Smith would be modified to provide: displaying a list of at least one group of computer programs so as to allow a user to select a group of computer programs to be built, each of said at least one group of computer programs having a set of specific environmental requirements in which said at least one group of computer programs is to be compiled and executed...Since Smith teaches a selection process...other than that recited in the Claim 1, Smith teaches away from Applicant' invention, which is an indicium of non-obviousness (remark, page 20)."

In response, Smith discloses a "software development toolkit, the such as the ARM Developer Suite (ADS)" to present "its users with many build options (page 7 lines 16-20)" and to "model the compatibility and desirability in the target execution environment of various build option parameters selected by a user (abstract; page 1, 0004)." The toolkit includes "library selecting logic responsive to said library selector

for selecting, from among a plurality of libraries of machine code entities, a selected library of machine code entities having a best level of execution environment requirements compatible with said limiting level of execution environment requirements indicated by said library selector (pg 1, 0011).” “This library selector may be used to select a particular library of machine code entities compatible with these execution environment requirements whilst providing the most desirable machine code entities to exploit the capabilities of the target data processing system (abstract, page 1, 0004).” Therefore, the user selects the different build options for source code using the toolkit.

The applicant’s argues that:

Smith stated that the source code is written by the user which is used in the build. This further teaches away from Applicant’ invention...by stating a software developer wrote the code. Thus, no selection of computer code is necessary according to Smith.

In response, Smith states that in ...the context of a linker a source code entity...represents an entity explicitly specified as an input by the user...in contrast to entities located automatically by the linker (page 3 0050).” The user selects the build option parameters to be used with a particular source code. That is, the user first selects the source code to be built with particular build options and then selects the build options.

The applicant argues that:

“As shown by Smith, the linker process is well after all user input has been provided, and so contrary to the rejection, there I no basis to provide displays associated with the linker...The Examiner

has not explained how computer displays and computer selection input from such a display would or could be incorporated in the complex process of Smith (Remark, page 21)."

In response, the examiner did not combine the two references as a whole. The displaying a list of a plurality of computers portion is not added to Smith's linker, rather, to Smith's software development toolkit with user build options. The linker is included in this toolkit. Therefore, the examiner did not state that displaying a plurality of computers is associated with the linker. Smith does not explicitly teach displaying a list of a plurality of computers using the development toolkit, however, TeamWare teaches that it was known in the art of software component-based development and configuration, at the time applicant's invention was made, to visually indicate each different computers to the user and to distribute "builds over several hosts to build programs concurrently over a number of workstations or multiple CPUs (section 20: Using DistributedMake). Thus, all the build option aspects described in Smith do fulfill the features brought out in applicant's claims, given that the displaying the list of a plurality of computers aspect of TeamWare is combined into them, for which the motivation is as given above. If applicant means anything more, this must be brought out in the claims to further clarify the invention.

The applicant states that: "Smith is a continuation-in-part application that was filed on March 5, 2003, which is after Applicant's filing date of June 11, 2001... Smith is a proper reference only if the material relied upon by the Examiner was in the originally filed application of Smith."

In response, in the previous office action mailed 1/22/2004, the examiner stated why the Smith reference constitutes prior art in the conclusion section. The reason is repeated below.

Conclusion

7. The U.S. Patent application publication 2003/0182650 applied to the claim rejections above is considered to be a proper reference since this application is a continuation-in-part of application No. 09/503,485 filed on 2/14/2000. These two applications are identical except minor wording difference in the abstracts and several added claims in the continuation-in-part application. Therefore, the applied art is a proper reference.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2193

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Insun Kang whose telephone number is 571-272-3724.

The examiner can normally be reached on M-F 7:30-4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on 571-272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

I. Kang
Patent Examiner
6/23/2005


KAKALI CHAKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100